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ABSTRACT

Information about asbestos in the schools is provided in this pamphlet. The document describes the nature and dangers of asbestos and the passage of the Asbestos Hazard Emergency Response Act in 1986. The responsibilities of school boards and other school officials to protect students and employees from asbestos exposure are explained as well as plans for school management. A list of regional asbestos coordinators is included. (LMI)

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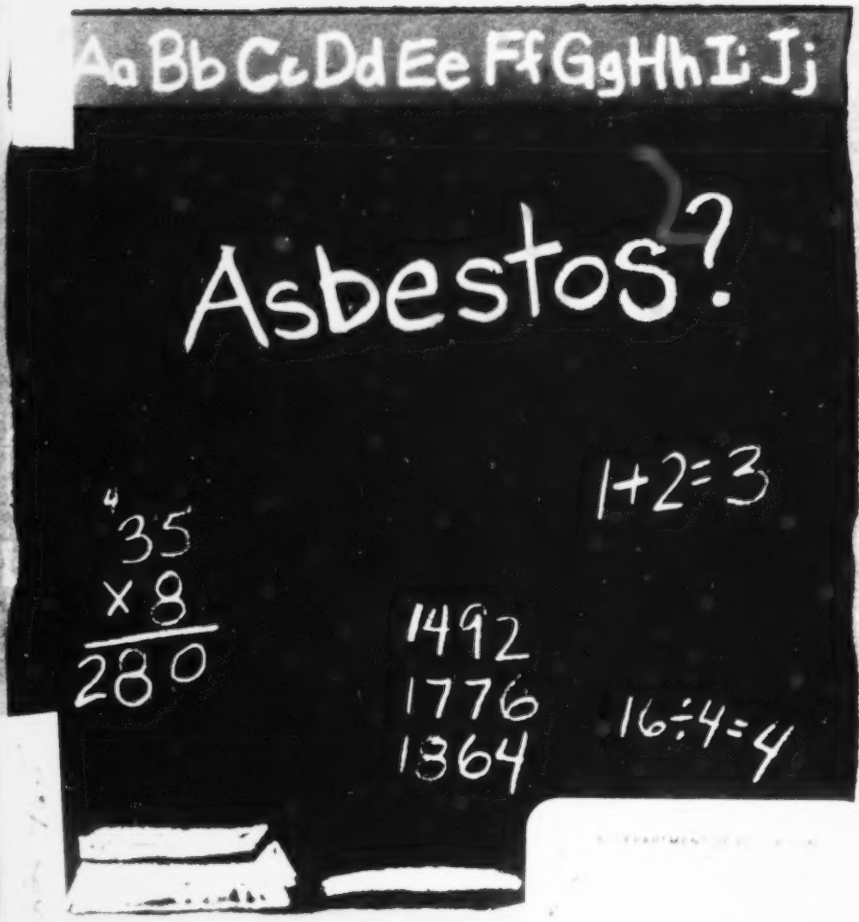
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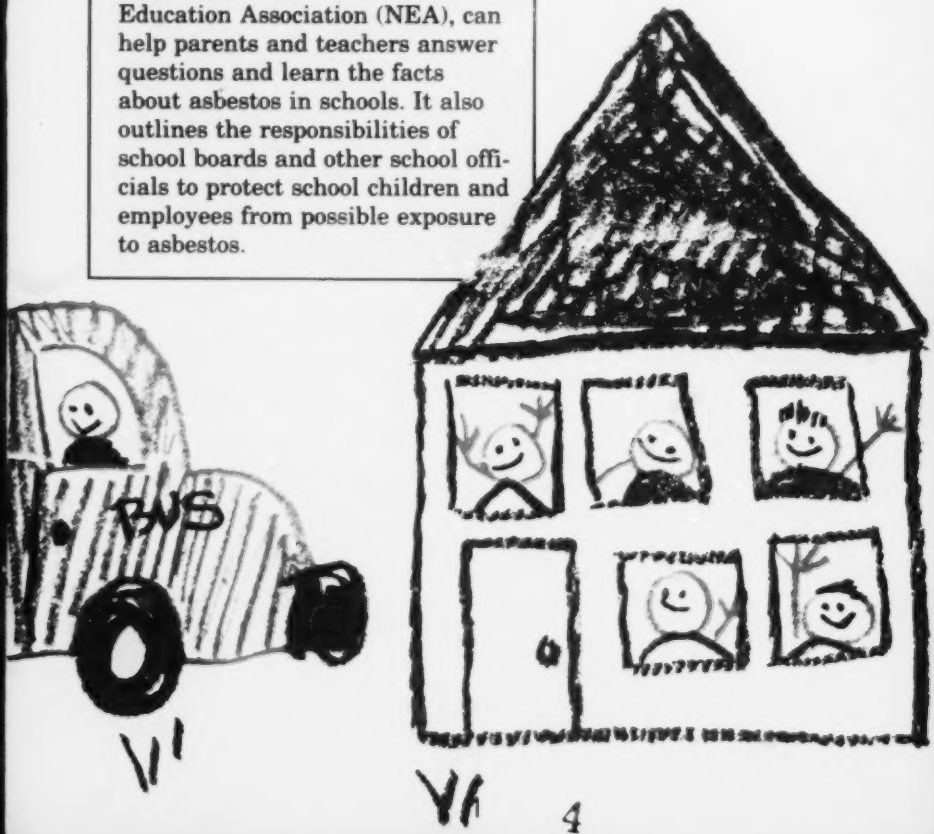
Introduction

- When is asbestos a problem?
- What should my school and school district be doing about asbestos?
- What can I do to help?

This pamphlet, developed by the U.S. Environmental Protection Agency (EPA) in conjunction with the National Parent Teacher Association (PTA) and the National Education Association (NEA), can help parents and teachers answer questions and learn the facts about asbestos in schools. It also outlines the responsibilities of school boards and other school officials to protect school children and employees from possible exposure to asbestos.

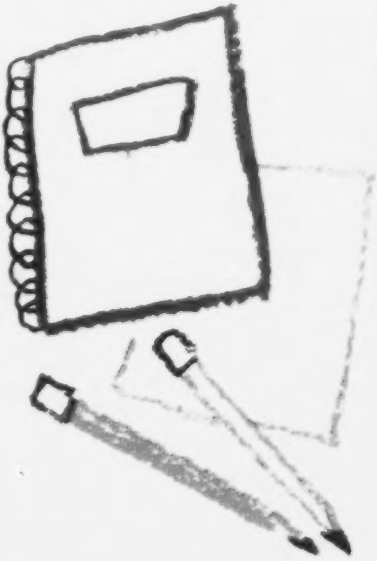


The Asbestos Issue

Asbestos fibers can cause serious health problems. If inhaled, they can disrupt the normal functioning of the lungs. Three specific diseases—asbestosis, lung cancer, and another cancer known as mesothelioma—have been linked to asbestos exposure. These diseases do not develop immediately after inhalation of asbestos fibers; it may be 20 years or more before symptoms appear.

In general, as with cigarette smoking, the more asbestos fibers a person inhales, the greater the risk of developing an asbestos-related disease. The most severe health problems from asbestos exposure have been experienced by some workers who held jobs in industries such as shipbuilding, where they were exposed to very high levels of asbestos in the air. These employees worked directly with asbestos materials on a regular basis as a part of their jobs. Much uncertainty surrounds the risk from exposure to low levels of asbestos fibers.

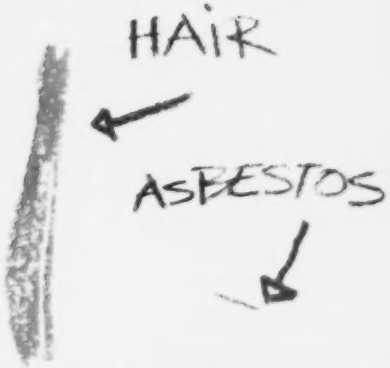
Nevertheless, the risk of school children being exposed to even low levels of asbestos is a concern. Acting on this concern, Congress passed the Asbestos Hazard Emergency Response Act (AHERA) in 1986 to protect school children and school employees from exposure to asbestos in school buildings. This pamphlet describes key parts of these new federal asbestos requirements for schools.



What Exactly Is Asbestos?

Asbestos is a mineral found in certain types of rock formations. When mined and processed, it takes the form of very small fibers which are usually invisible to the naked eye. A typical asbestos fiber is 1,200 times smaller than a strand of human hair. These individual fibers are generally mixed with a material which binds them together so that they can be used in many different products. Because the fibers are so small and light, they can remain in the air for many hours if they are released from asbestos-containing material. This increases the chance that someone will inhale them.

Asbestos became a popular commercial product because it is strong, won't burn, resists corrosion, and insulates well. Its commercial use in the United States began in the early 1900s, when it was used as insulation in steam engines. Since then asbestos has been used to create about 3,000 insulation, fireproofing and other products. The peak years of asbestos use in schools were from World War II until the 1970s,



when several major kinds of asbestos materials were banned because of growing concern about related health effects.

Where Is Asbestos Likely to Be Found?

EPA estimates that there are asbestos-containing materials in most of the nation's approximately 107,000 primary and secondary schools. Asbestos is most commonly used in schools as insulation and in building materials. It has also been used in floor and ceiling tile, cement pipe, corrugated paper pipe wrap, acoustical and decorative insulation, pipe

and boiler insulation, and spray-applied fireproofing. The fluffy white substance you may find above a dropped ceiling, for example, is one type of spray-applied material. The amount of asbestos in these products varies widely, from 1 to 100 percent, depending on the use. Pipe and boiler insulation typically contains more asbestos than other building materials. The precise amount of asbestos in a product cannot always be determined from labels—since most products used in the past were not labeled—or by asking the manufacturer. Instead, positive identification of asbestos requires analysis of samples by a qualified laboratory.

When Is Asbestos a Problem?

Intact and undisturbed asbestos materials generally do not pose a health risk. Asbestos materials, however, can become hazardous when, due to damage or deterioration over time, they release fibers. If the fibers are inhaled, they can lead to health problems.

The potential for an asbestos-containing material to release fibers depends primarily on its condition. If the material, when dry, can be crumbled by hand pressure—a condition known as "friable"—it is more likely to release fibers, particularly when damaged. The fluffy spray-applied asbestos fireproofing material is generally considered "friable." Pipe and boiler insulation materials can also be "friable," but they

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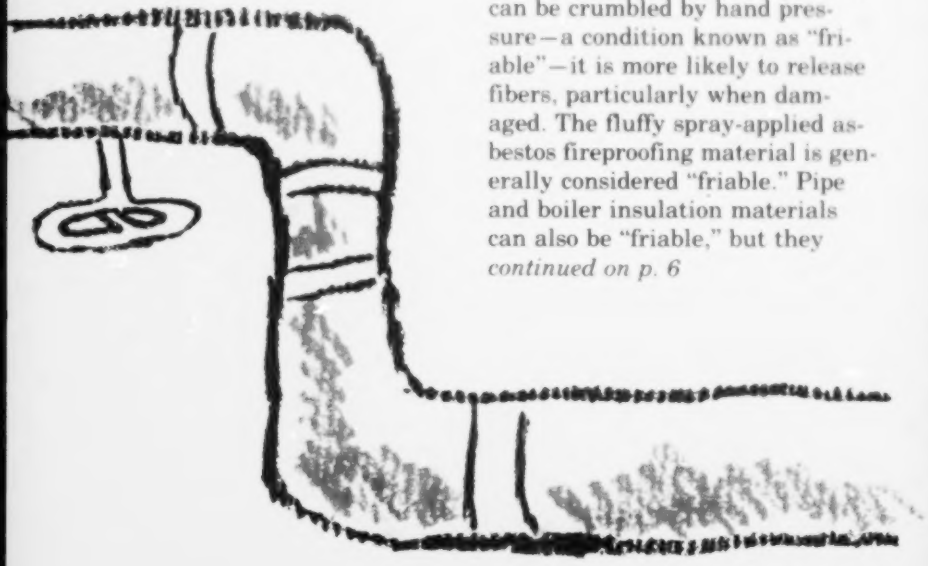


What Has the Government Done about Asbestos?

The federal government has been regulating asbestos for a number of years. Any material which contains as little as 1 percent asbestos is subject to federal asbestos regulations. Progress is being made to limit the uses of asbestos and to identify substitute materials. EPA is now considering ways to phase out the use of other asbestos materials.

On October 22, 1986, President Reagan signed AHERA into law. The Act required EPA to develop regulations creating a comprehensive framework for dealing with asbestos in public and nonprofit private elementary and secondary schools. The regulations were published on October 30, 1987.

The AHERA schools rule requires all public school districts and private schools, known as local education agencies or LEAs, to inspect all school buildings for both friable and nonfriable asbestos; to develop plans to manage asbestos in schools; and to carry out the plans in a timely fashion. The rule also provides an opportunity for parents, teachers, and other school employees to become familiar with and involved in their school's asbestos management program. School officials are required to notify parent, teacher and employee groups about asbestos-related activities.

EPA also has established an asbestos-in-schools assistance program. Through its Headquarters office in Washington, D.C., and ten Regional offices, EPA provides direct technical assistance to help thousands of school officials and workers understand asbestos issues. EPA makes funds available to train asbestos professionals, to assist states in developing asbestos programs, and to help schools comply with the federal asbestos regulations. Since 1985, EPA also has provided loans and grants to help financially needy public and private schools correct serious asbestos hazards through the Asbestos School Hazard Abatement Act (ASHAA) program. Finally, EPA publishes informational pamphlets for the public.

often are enclosed in a protective casing which prevents fiber release unless the casing is damaged. Some materials which are considered "nonfriable," such as vinyl-asbestos floor tile, can also release fibers when sanded, sawed or otherwise disturbed. Materials such as asbestos cement pipe can release asbestos fibers if they are broken or crushed when buildings are demolished, renovated or repaired.

What Are the Proper Methods for Managing Asbestos?

Most asbestos-containing material can be properly managed where it is. In fact, asbestos that is managed properly and maintained in good condition appears to pose *relatively little risk* to students and school employees. Accordingly, the AHERA schools rule rarely requires the removal of asbestos materials.

Proper asbestos management begins with a comprehensive inspection by qualified, trained and experienced inspectors, accredited through an EPA or state-approved training course. Inspecting the condition of asbestos materials—initially with AHERA-accredited inspectors and at least semi-annually with trained custodial or maintenance staff—is extremely important so that changes in the material's condition, such as damage or deterioration, can be detected and corrected before the condition worsens. Sometimes normal school or maintenance activities can damage asbestos material and cause fiber release, particularly if the material is "friable." A thorough initial inspection and regular surveillance can prevent accidental exposure to high levels of asbestos fibers.

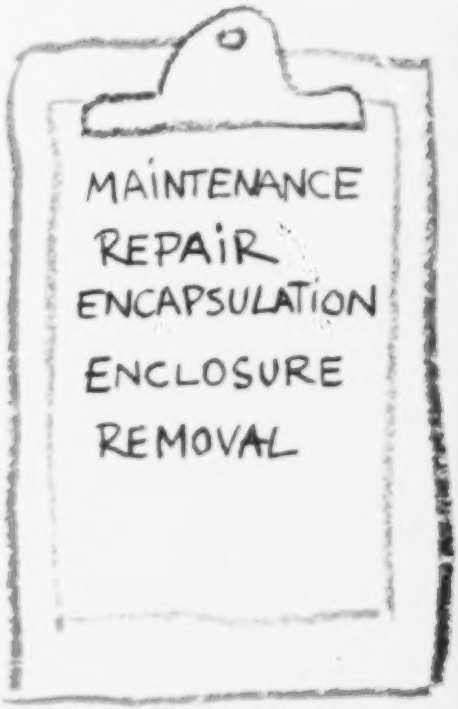
The methods (see page 7), in AHERA terminology, are asbestos "response actions." The last three methods of response actions—encapsulation, enclosure, and removal—and sometimes the second method—repair—must be done by accredited asbestos professionals.

The final response action, asbestos removal, is generally necessary only when the material damage is extensive and severe, and other actions will not control fiber release. Although the AHERA schools rule does not prohibit schools from re-

How To Respond?

Proper methods for dealing with asbestos are:

- Developing and carrying out a *special maintenance* plan to insure that asbestos-containing materials are kept in good condition. This is the most common method when the materials are in good condition at the time of initial inspection.
- *Repairing* damaged pipe or boiler covering, which is known as thermal system insulation.
- Spraying the material with a sealant to prevent fiber release—a process called *encapsulation*.
- Placing a barrier around the materials, known as an *enclosure*.
- *Removing* asbestos—under special procedures.



moving any asbestos materials, removal decisions should not be made lightly. An ill-conceived or poorly conducted removal can actually *increase* rather than eliminate risk. Consequently, all school removal projects must be designed, supervised, and conducted by accredited professionals and should be performed in accordance with

state-of-the-art procedures. In addition, schools may wish to hire an experienced and qualified project monitor to oversee the asbestos contractor's work to make sure the removal is conducted safely.

Only an AHERA-accredited management planner—an asbestos professional with proper training, qualifications, and experience—is authorized to advise school officials on which response action is appropriate for a particular situation. The final selection of the proper method is up to school officials after they receive the advice of the school's accredited management planner.

What Should My School & School District Be Doing?

Under the new AHERA schools rule, each local education agency (LEA, which means a school district or private school) must take the following asbestos-related actions:

1 Designate and train a person to oversee asbestos-related activities in the school system.

2 Inspect *every* school building for "friable" and "nonfriable" asbestos-containing building materials.

3 Prepare a management plan for managing asbestos and controlling exposure in each school.

4 Consult with accredited inspection and management professionals to identify and carry out whatever asbestos actions are necessary and appropriate to protect health and the environment. These actions or methods must be documented in the management plan.

5 Notify the public about the asbestos inspection and the availability of the asbestos management plan for review.

6 Use only properly accredited persons to conduct inspections, to develop the asbestos management plan, and to carry out the appropriate response actions.

7 Keep records of all asbestos-related activities in the plan and make them available for public review.

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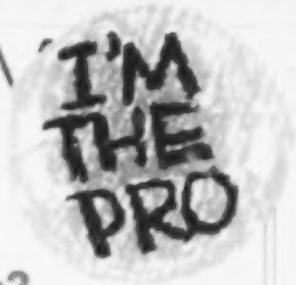


What Does the LEA Designated Person Do?

School officials may choose a consultant or one of their own employees to oversee their asbestos program. This designated person must meet certain training requirements, and serves as the single point of contact for public information about asbestos-related activities in the LEA. He or she is responsible for:

- Ensuring that initial asbestos inspections, reinspections every three years, and semi-annual surveillance activities are conducted properly by qualified personnel.
- Including results of the inspection in the management plan. The plan must identify all asbestos-containing building materials found in schools and recommend actions for dealing with asbestos hazards.
- Submitting the management plan to the appropriate state agency, designated by the Governor to review and approve plans, by October 12, 1988 (or by May 9, 1989, if the school has been granted a deferral by the state).
- Making sure that custodial and maintenance workers receive required safety training and information about the location of asbestos-containing materials in their school. Warning labels must be posted in all routine maintenance areas, such as boiler rooms, where asbestos-containing building materials are found.
- Assuring that response actions specified in the management plan are carried out according to the plan's timetables. The regulations require that all LEAs begin to carry out their management plans no later than July 9, 1989.
- Seeing that all asbestos records required by the regulations are accurately maintained.
- Informing all teacher, parent and employee organizations at least once a year about the asbestos activities in each school and about the availability of the management plan for their review.

When Are School Management Plans Due?

As noted before, management plans originally were due to the states by October 12, 1988. Because some LEAs have had problems complying with this deadline, however, Congress amended AHERA to allow school officials to apply for extra time to inspect their schools and prepare management plans. The amendment permitted LEAs to ask their states for a deferral of the October 1988 deadline. If the state granted the deferral, the LEA must submit its plan to the Governor no later than May 9, 1989. Before applying to the state for a deferral, an LEA is required to notify parent, teacher and employee organizations of its plan to file a deferral request. In the case of a public school, the LEA was also required to discuss its intention to file at a public meeting *before* submission to the state.

Schools which sought deferrals had to certify to the state that they made a "good faith" effort to meet the original October AHERA deadline. They also had to provide a schedule outlining significant activities leading up to submission of the plan by May 9, 1989. This schedule of events must include inspecting the school, having samples of suspected asbestos material analyzed by a qualified laboratory, and preparing the management plan.

Although your LEA may have applied for extra time to inspect its buildings and to prepare its asbestos management plan, *all* schools are still required to begin putting their plans into action no later than *July 9, 1989*.

What Can I Do to Help?

As a parent, teacher, service worker or other school employee, the most important thing you can do first is to learn about your school's asbestos activities. As you do so, remember that *the mere presence of asbestos in a school doesn't necessarily mean that the health of its occupants is endangered*. Again, asbestos that is managed properly and maintained in good condition poses relatively little risk. Federal regulations do not require the removal of all friable asbestos from schools until the building is demolished. In fact, during the life of the building, other methods of dealing with the material are often preferable to removal.

In those cases when removing asbestos *is* determined to be the appropriate decision, the work

must be done under strict controls by trained, qualified and experienced asbestos professionals who are properly accredited under AHERA.

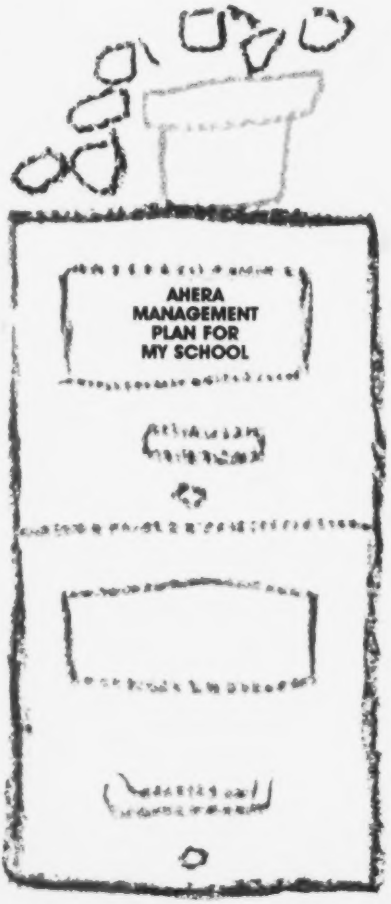
Step One: Awareness

Your first step is to find out if your school has prepared or is preparing an asbestos management plan as required by AHERA. By becoming familiar with this plan, you will know if asbestos materials are in the school, what plans the school has for managing this asbestos, and when these activities are scheduled to occur.

Step Two: Minimize Disturbance

There are several simple things you can do to minimize your exposure to asbestos. The most important one is to find out which materials in your school contain asbestos; you should be able to get this information from your LEA's designated person or from the school's management plan.

Once you know where asbestos is, use special care to insure that any day-to-day activities, such as repair or maintenance work, do not disturb the material. In fact, special training is required to participate in any maintenance activities which might disturb asbestos. In schools, asbestos-containing materials can also be damaged by student activities. For example, an asbestos ceiling in a gym may be disturbed if basketballs or other objects are thrown up against it. Students and others who use the gym should be warned to avoid such activities.



Who Is Responsible for Making AHERA Work?

All of us are responsible. Making the AHERA schools rule work to protect the nation's school children and employees is a joint responsibility of the LEA and its officials, school employees, parents, students, federal and state governments, and asbestos control professionals.

EPA conducts compliance inspections of hundreds of schools each year to make sure they are obeying the law. The Agency is responsible for insuring that schools comply with AHERA and it will investigate reported violations. Since the AHERA schools rule is intentionally designed to involve parent, teacher and other school employee organizations, however, it is important that *you* work with your school to make sure that its asbestos program is properly conducted.

Where Can I Get More Information?

Under AHERA, citizens have the opportunity to become informed about asbestos activities in their schools. If you have a question or concern about those activities, you should first contact your LEA designated person. This person knows the most about the asbestos situation in your school. When you find out who this person is, ask him or her what steps your school has taken, and will continue to take, to meet the requirements of the AHERA schools rule.

The LEA designated person also can tell you which agency in your state government is responsible for state AHERA activities. The same agency usually is responsible for reviewing the LEA's asbestos management plan. This LEA designated person also should be aware of any local asbestos control requirements.

State AHERA designees also are a good source of information. These officials can help you better understand the AHERA schools rule and can answer questions about your school's asbestos activities.

You also can contact your EPA regional office. There are ten EPA regional offices around the country, and each one has a Regional Asbestos Coordinator (RAC). Their addresses and phone numbers are listed at the end of this pamphlet. School employees cannot be penalized for contacting EPA or the appropriate state agency to discuss their concerns about a school's asbestos program.

Local, state, and national parent and teacher organizations are other good sources of information about asbestos in schools. Many of these groups worked with EPA in

developing the new AHERA schools rule, and some have started their own educational efforts to improve understanding of the AHERA requirements and proper asbestos control practices. The addresses and phone numbers of the national offices of PTA and NEA are listed at the end of this pamphlet.

The EPA Toxic Substances Control Act (TSCA) Hotline is available to answer your questions about the new AHERA regulations and about asbestos in general. You can obtain a variety of asbestos guidance documents by calling the TSCA Hotline at (202) 554-1404.

Finally, EPA has an asbestos ombudsman to help citizens with asbestos-in-schools issues, questions, and complaints. This office can be reached through a toll-free number at (800) 368-5888.

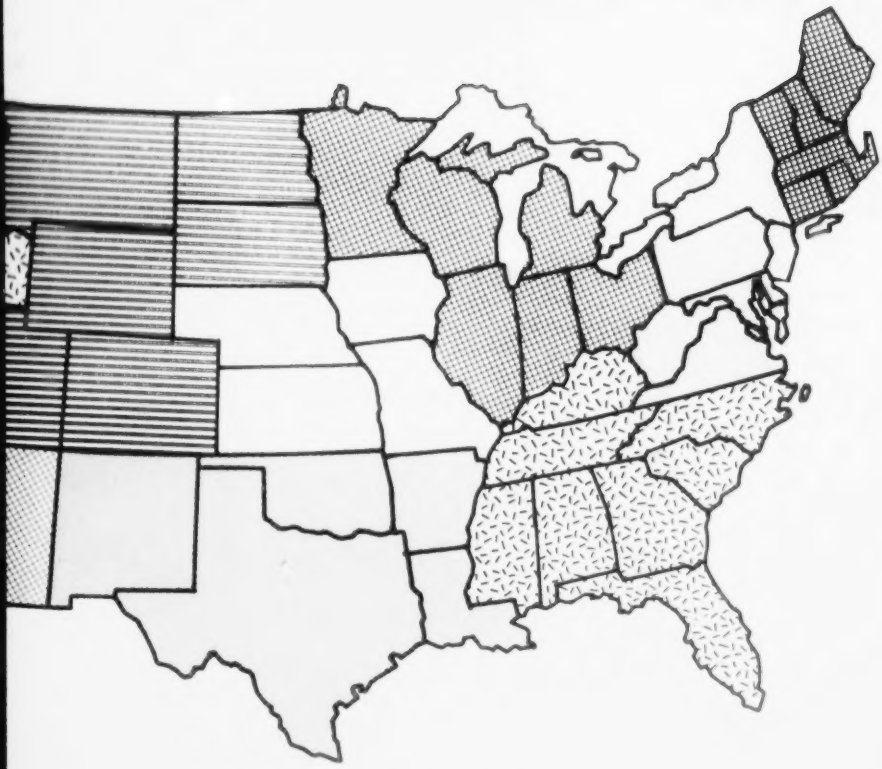
Regional Asbestos Coordinators

EPA Region 1

JFK Federal Building
Boston, MA 02203
(617) 565-3835
(Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont)

EPA Region 2

Woodbridge Avenue
Edison, NJ 08837
(201) 321-6671
(New Jersey, New York, Puerto Rico, and Virgin Islands)



EPA Region 3

841 Chestnut Street
Philadelphia, PA 19107
(215) 597-3160
(Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia)

EPA Region 4

345 Cortland Street, N.E.
Atlanta, GA 30365
(404) 347-5014
(Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee)

EPA Region 5

230 S. Dearborn Street
Chicago, IL 60604
(312) 886-6003
(Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin)

EPA Region 6

Allied Bank Tower
1445 Ross Avenue
Dallas, TX 75202-2733
(214) 655-7244
(Arkansas, Louisiana, New Mexico, Oklahoma, and Texas)

EPA Region 7

726 Minnesota Avenue
Kansas City, KS 66101
(913) 236-2835
(Iowa, Kansas, Missouri, and Nebraska)

EPA Region 8

One Denver Place
999 18th Street, Suite 500
Denver, CO 80202-2413
(303) 293-1744
(Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming)

EPA Region 9

215 Fremont Street
San Francisco, CA 94105
(415) 974-7290
(Arizona, California, Hawaii, Nevada, American Samoa, and Guam)

EPA Region 10

1200 6th Avenue
Seattle, WA 98101
(206) 442-4762
(Alaska, Idaho, Oregon, and Washington)

National Parent Teacher Association

National PTA
700 N. Rush Street
Chicago, IL 60611
(312) 787-0977

National PTA
Government Relations Office
1201 16th Street, N.W.
Suite 621
Washington, DC 20036
(202) 822-7878

National Education Association

NEA
1201 16th Street, N.W.
Washington, DC 20036
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(202) 822-7300
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Office of General Counsel
(202) 822-7035

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